

METHOD AND SYSTEM FOR LIMITING
CURRENT IN A HEAD RETRACT CIRCUIT

ABSTRACT OF THE DISCLOSURE

A method and system for limiting current in a read/write head retract circuit is disclosed. The system includes a temperature sensor (75) for sensing a temperature of the disk drive read/write head retract circuit (53). The temperature sensor (75) generates an output signal indicating whether the temperature is above or below a threshold temperature. The system also includes a voltage regulator (100) which applies a voltage to an actuator motor (54). The voltage regulator (100) receives an input signal operatively associated with the output signal of the temperature sensor (75), and adjusts the voltage applied to the actuator motor (54) in response to the input signal. In one embodiment, the system includes a hysteresis circuit (88) which adjusts the threshold temperature of the temperature sensor (75) when the temperature sensor output changes. The hysteresis circuit (88) prevents the system from oscillating rapidly around the threshold temperature of the temperature sensor (75), and thereby avoids unnecessary wear of the system components.

FIGURE 2